

Libove et al. Applicant submits that the combination of references does not teach all of the features of the present invention as claimed by applicant.

Applicant claims in claim 38 a non-invasive powerline communications system comprising: means for generating communication signals at a first location for transmission on a powerline; means for reactively coupling the communication signals to the powerline without tapping the powerline; and means for receiving said communication signals at a second location.

Abraham does not disclose “means for reactively coupling the communication signals to the powerline without tapping the powerline” (emphasis added) as claimed in claim 38. This feature is also present in independent claims 54-57. *Abraham* clearly teaches physically tapping the powerline by hardwiring the device to the powerline as shown in Figs. 4, 6, 6A, 7 and 8 of *Abraham*. The Examiner acknowledged in the Office Action dated May 9, 2001 that *Abraham* fails to disclose this feature.

However, the Examiner asserts that *Abraham* discloses a coupling device which comprises air-coils with inductances L1 and L2 which are inductively and capacitively coupled creating an air-core transformer. See Col. 2, lines 16-43 of *Abraham*. The Examiner further asserts that *Libove* discloses a coupling device which uses contactless measurements, and that it would have been obvious to one skilled in the art to incorporate a non-contact means for not tapping the powerline as discussed by *Libove* with the system of *Abraham*.

With regard to obviousness, the law is clear that:

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. ACS Hospital System, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

Abraham does not disclose, teach, or suggest means for reactively coupling the communication signals to the powerline without tapping the powerline as claimed by the applicant. In fact, the above section of *Abraham* cited by the Examiner refers to Fig. 4 of *Abraham*, which clearly shows that the inductor L1 physically taps the powerline.

Additionally, *Abraham* states that:

The first plurality of capacitors 34 are connected together in series between one of the power-lines 12 and the primary winding 38 of the first air coil 36. The primary winding 38 of the first air coil 36 is thereafter serially connected to the other power line 12. The secondary winding 40 of the first air coil 36 is connected to its respective transmitter means 16. The second plurality of capacitors 42 are serially connected together between one of power lines 12 and the primary winding 46 of the second air coil 44. The primary winding 46 of the second air coil 44 thereafter being serially connected to the other power line 12. As noted above resistors, 35 and 45 function to evenly divide the voltage and serve to minimize spiking and afford lightning protection. (Col. 8, lines 29-41 at *Abraham*) (emphasis added).

Applicant submits that it is clearly evident that each coupling network of *Abraham* taps the powerline. *Abraham* does not disclose, teach or suggest means for coupling the communication signals to the powerline without tapping the powerline as claimed by the applicant. Accordingly, applicants submit that claims 38-67 are not unpatentable over the cited references.

If for any reason this Preliminary Amendment is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance

prosecution, please telephone the undersigned or his associates, collect in Waltham,
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Respectfully submitted,


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